



County Code Updates for Environmental Site Design (ESD)

February 1, 2010



What is Environmental Site Design (ESD)?

According to Chapter 5 of the Maryland Stormwater Manual, ESD is a comprehensive design strategy for maintaining predevelopment runoff characteristics and protecting natural resources. ESD relies on integrating site design, natural hydrology, and smaller scale stormwater management controls to capture and treat runoff. As required by the Stormwater Management Act 2007 and the MS4 Permit, Montgomery County must implement ESD to the Maximum Extent Practicable (MEP).

ESD involves PROCESSES and PRACTICES

PRACTICES

- Alternative Surfaces
 - Green Roofs
 - Permeable Pavements
 - Reinforced Turf
- Non-Structural Practices
 - Disconnection of Rooftop Runoff
 - Disconnection of Non-Rooftop Runoff
 - Sheetflow to Conservation Areas
- Microscale Practices
 - Rainwater Harvesting
 - Submerged Gravel Wetlands
 - Landscape Infiltration
 - Infiltration Berms
 - Dry Wells
 - Micro-Bioretenion
 - Rain Gardens
 - Swales
 - Enhanced Filters

PROCESSES

- Optimize conservation of natural features.
- Minimize impervious surfaces.
- Slow down runoff to maintain discharge timing and to increase infiltration and evapotranspiration.
- Identify potential locations for ESD practices early in the concept planning stage.
- Concurrently plan for stormwater management, density concerns, parking, fire and rescue, forest conservation, and the variety of other Code requirements identified below.

For more information:

<http://www.montgomerycountymd.gov/stormwaterpermit>

Summary of the Code Review Process

- Barriers are impediments to ESD and are typically found when a specific planning or design requirement is counter to one or more ESD practice design requirements.
- Gaps are less obvious. Due to a lack of detail in the Code, these are subject to interpretation and may serve as impediments in certain situations.
- Opportunities are sections that promote or have the potential to promote ESD. In some of these cases, expanded language that references ESD is recommended.

Chapters with No Barriers or Gaps for ESD

- Chapter 14. Development Districts
- Chapter 18A. Environmental Sustainability
- Chapter 21. Fire and Rescue Services
- Chapter 24B. Homeowners' Associations
- Chapter 27A. Individual Water Supply & Sewage Disposal Facilities
- Chapter 36. Pond Safety
- Chapter 44. Schools and Camps
- Chapter 45. Sewers, Sewage Disposal and Drainage
- Chapter 54A. Transit Facilities

Chapters with Limited Barriers to ESD

- Chapter 8. Buildings
- Chapter 22. Fire Safety Code
- Chapter 22A. Forest Conservation - Trees
- Chapter 26. Housing and Building Maintenance Standards
- Chapter 40. Real Property
- Chapter 41. Recreation and Recreation Facilities
- Chapter 49. Streets and Roads
- Chapter 50. Subdivision of Land
- Chapter 58. Weeds
- Trees, Approved Technical Manual (MNCPPC)

Chapters with Significant Barriers, Gaps, and Opportunities

- Chapter 59 – Zoning (ESD coordination with Montgomery County recent Zoning Code Rewrite process)



Montgomery County Clean Water Task Force

February 1, 2010 1:00 - 3:00pm
Rockville Library, 1st floor meeting room



Purpose

- Review background on Montgomery County's stormwater permit and the Clean Water Task Force;
- Summary of environmental site design and how it addresses stormwater and protects natural resources;
- Overview of County projects to implement environmental site design;
- Learn about Montgomery County activities to modify or rewrite the development approval process and zoning codes;
- Learn about review of Montgomery County Codes and recommendations to include environmental site design;
- Discuss Agency and stakeholder review of opportunities, gaps and barriers and how to promote and accelerate environmental site design implementation;
- Discuss organization and next steps for Water Resources Policy Coordinating Committee.

Meeting Agenda

1:00-1:10 Introduction and Agenda Review

Brief Presentation

Objective: provide a clear road map for the meeting

Juliana E. Birkhoff, RESOLVE

Bob Hoyt, Director, Montgomery County Department of Environmental Protection (DEP)

1:10-1:15 Montgomery County's NPDES Permit and the Clean Water Task Force

Brief Presentation

Objective: make sure everyone is informed so they can participate well

Meo Curtis, Montgomery County DEP

1:15-1:35 What Is Environmental Site Design?

Brief Presentation

Objective: make sure everyone knows the techniques so they can comment on how to incorporate into codes

Jennifer Zielinski, Biohabitats

1:35-1:40 Questions and Answers about Environmental Site Design

Clean Water Task Force Members

Juliana Birkhoff, RESOLVE

1:40-1:50 Relevant Planning and Zoning Issues

Objective: Make sure everyone knows what Department of Planning is already doing so review and recommendations are informed by current efforts

Rollin Stanley, Director, Montgomery County Planning Department

1:50-2:10 Identifying Potential Impediments to Environmental Site Design in County Code

Presentation

Objective: learn what consultants have found in Code and their recommendations

Nicole Stern and Jennifer Zielinski, Biohabitats

2:10-2:45 What Do Agencies and Stakeholders Think About Barriers and Recommendations to Overcome Them?

Comments from External Stakeholders and Facilitated Discussion

Objective: provide feedback to MD DEP on recommendations and discover any common ideas

Clean Water Task Force Members

Diane Cameron, Audubon Naturalist Society

Dusty Rood, Rogers and Associates

Juliana Birkhoff, RESOLVE

2:45-2:50 Public Comment

Opportunity for public to comment on barriers and recommendations

2:50-3:00 Next Steps and Organization of Water Resource Coordinating Committee

Facilitated Discussion

Objective: outline next steps for coordinated implementation strategy and NPDES permit support

Meo Curtis, Montgomery County DEP

Juliana E. Birkhoff, RESOLVE

3:00 Adjourn